Before the
Federal Communications Commission
Washington, D.C. 20554

In the matter of	)	
	)	
Revision of the Commission's Rules To	)	
Ensure Compatibility with Enhanced 911	)	CC Docket No. 94-102
Emergency Calling Systems	)	
	)	

February 2, 2004

Quarterly Report of Western Wireless Corporation
on its Enhanced 911 Phase II Deployment

Western Wireless Corporation ("Western"), on behalf of its subsidiaries, WWC Holding Co., Inc., WWC License L.L.C., and WWC Texas RSA Limited Partnership, and pursuant to the Federal Communications Commission's ("FCC") Order to Stay ("Order"), hereby submits its sixth Quarterly Report on its plans and progress regarding the deployment of Enhanced 911 ("E911") Phase I and Phase II services.[1] For purposes of E911 Phase II deployment and according to the Order, Western is defined as a Tier II carrier because it had more than 500,000 subscribers as of the end of 2001.[2]

I. Introduction

Western provides Commercial Mobile Radio Service ("CMRS") under the CellularOne brand name in 19 states west of the Mississippi River. Western's network is comprised of equipment from multiple manufacturers and infrastructure providers, and it operates analog and digital CMRS on its network using both Lucent and Nortel

[1] *See Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94-102, Order to Stay, FCC 02-210 (2002).
[2] *Id*

equipment. Additionally, Western's network accommodates roaming traffic from a wide assortment of carriers. Western has contracted with Intrado for assistance in deploying Phase I and Phase II services on its network using a handset-based solution – Assisted Global Positioning System ("AGPS"). Western submitted to the Commission its limited Petition for a waiver of the Commission's Phase II Rules on August 31, 2001.[3] In response to this and other carriers' waiver requests, the Commission issued its Order establishing the deployment and reporting schedules for Tier II and Tier III carriers. Western has previously submitted five Quarterly Reports apprising the Commission of its progress in deploying E911 services. This sixth report updates the Commission on Western's progress to date in deploying E911 services.

II. Handset Sales

As reported earlier, Western began selling and activating location-capable handsets in 2002, well in advance of the Commission's March 1, 2003 deadline. Western has continued to increase the number of GPS-enabled handsets it sells to its customers and now offers fourteen different models of handsets. Western is currently selling the Audiovox 8410, Audiovox 8600, Audiovox 8900, Audiovox 9500, Kyocera KE414, Kyocera 3245, Kyocera 2325, Kyocera 7135, Kyocera KX434, Motorola T720, Motorola V60i, Motorola 120e, Nokia 3585i and the Nokia 3586i handsets with GPS capabilities. These handsets include the necessary GPS chipset which, when 9-1-1 is dialed, will enable it to calculate the latitude and longitude of the customer based upon communications with orbiting satellites. Western is also currently evaluating additional location-capable handsets to offer to its customers.

[3] *See* Western Wireless Corp., Petition For Waiver of Section 20.18(g), CC Docket 94-102 (filed Aug. 31, 2001).

Western offers service to the public via a wide assortment of sales channels and distributors, including a significant portion of its sales coming from indirect third-party distributors. The indirect sales organizations sell Western's service to the public using a wide assortment of handset models that they purchase directly from vendors. As a result, Western has limited ability to influence the type of handsets sold by indirect distributors, especially when it comes to high-end phones that may have little or no value to consumers residing in areas where Phase II service has not been implemented. Consequently, achieving the FCC's handset sales benchmarks may be a challenge for carriers operating in markets where PSAPs are not currently capable of receiving Phase II service and where there are a limited number of Phase II E911 requests for service.

The FCC requires that no later than November 30, 2003 at least 50% of all new handsets activated be location capable. Western is pleased to report that as of November 30, 2003, approximately 73% of all digital handsets activated by it were GPS capable, and as of December 31, 2003, approximately 79% of all digital handsets activated were GPS capable, which continues the trend towards meeting the May 31, 2004 compliance date for 100% of all digital handsets activiated being Phase II compliant. Western is therefore in compliance with the Phase II handset sale requirements established by the Commission.

As the May 31, 2004 date approaches for meeting the requirement that 100% of all digital handsets sold be Phase II compliant, Western continues to work diligently towards meeting this deadline and is making significant progress towards this end. The Commission has clarified that the requirement for 100% new digital handset activations has the following important exception:

> The new handset activation benchmarks apply only to new handsets, not to new activations of older model or refurbished handsets (i.e., when a customer switches wireless service from one wireless carrier to another but retains his or her current handset, that "new activation" of service need not be included in the total of the wireless carrier's new handset activations for purposes of measuring ALI-capable handset activation benchmarks).[4]

In spite of this clarification about previously owned and activated handsets, it is not entirely clear whether non-GPS handsets already owned or acquired by existing customers through a third party are likewise excluded from determining compliance with the 100% threshold. Current Western customers may have existing non-GPS phones that are both analog and digital which they may choose to re-activate on its network. Other possibilities exist for similar non-GPS handset activation scenarios which do not readily fall into the standard established by the Commission and it is not clear whether or not such scenarios are encompassed in the handset activation exception noted above. The Commission's requirement calls for "100% of all new digital handsets activated"[5] but this distinction between analog and digital handsets may not clearly address all of the possible exceptions possible.

Western is well on its way to reaching the Commission's goals of 100 percent GPS activations, but without further guidance as to how to handle the exceptional situation where a rare non-GPS handset may be activated on its network, Western will look to the Commission's earlier statement that "carriers do not have complete control over their customers' handset choices or over handset manufacturers and that it will likely be impossible to literally achieve 100 percent penetration of ALI-capable

[4] Fourth Memorandum Opinion and Order, 15 FCCR 17422, par. 34 (2000).
[5] Id at par. 35. (emphasis added).

handsets."[6] These rare situations where a carrier that has successfully achieved 100 percent of all new digital GPS activations may indeed activate an occasional handset that is non-GPS capable will surely fall within the conceivable exceptions allowed by the Commission.[7]

III. Network Deployment

Western has completed the necessary switch upgrades along with the appropriate database and network links to the Mobile Positioning Center ("MPC") and Position Determination Equipment ("PDE") to provide E911 services. Both the MPC and PDE are critical elements of Western's Phase II network. Furthermore, Western has carefully coordinated its testing and deployment efforts with Public Safety Answering Points ("PSAPs") and Local Exchange Carriers ("LECs"). Lastly, Western completed the software upgrades to its Nortel and Lucent Mobile Switching Centers ("MSCs"). The upgraded switching software enables the MSCs and handsets to communicate effectively in order to deliver the signaling data containing the location information of the caller.

As reported earlier, Western first deployed E911 Phase II service in the First Quarter of 2003, and is currently delivering Phase II service to eleven PSAPs in the Texas and Kansas.

In spite of these successful deployments, Western reiterates its earlier statements regarding the difficulty of deploying E911 Phase II services in rural America. In many rural areas, the LEC networks and the public safety equipment require substantial upgrades in order to be able to support the advanced signaling and data elements

[6] Third Report and Order, CC Docket No. 94.102, FCC 99-245 (Released October 6, 1999).
[7] To the extent that these handset sales issues are not resolved, Western may seek formal clarification from the Commission.

associated with Phase II service. In many of its states, Western is the first wireless carrier of any size undertaking Phase II deployment efforts.

In some states, both the LEC and the PSAP are still in the process of upgrading their equipment to be capable of receiving and processing Phase II location information. There continues to be numerous unresolved obstacles to deployment of Phase II E911 service in certain states. As the Commission is aware, the LECs play a critical role in the delivery of service from the wireless network to the PSAP, and without the complete preparation and upgrading of the LEC network, the service will not work. For instance, Phase II service requires an additional Automatic Location Identification ("ALI") database upgrade to query the MPC at the time of a Phase II call in order to successfully deliver the ALI data to the PSAP. Many of the ALI databases are operated by the LEC, and as stated in Dale N. Hatfield's Report to the Commission regarding the technical and operational issues impacting the provision of wireless enhanced 911 services ("Hatfield Report"), most LECs have a great deal of work left to do in order to complete the necessary upgrades.[8]

Without such an upgrade to the ALI database, a wireless carrier cannot deliver Phase II latitude and longitude information to the PSAP. The Commission's rules clearly state that the PSAP is responsible for the upgrades to the ALI database.[9] The Commission established the input to the LEC Selective Router as being the demarcation point for determining which party should pay for any necessary upgrades.[10] The ALI

[8] *See* Dale N. Hatfield, A Report on Technical and Operational Issues Impacting The Provision of Wireless Enhanced 911 Services, October 15, 2002.
[9] Letter from Thomas J. Sugrue to Kathleen B. Levitz, BellSouth Corporation, et al., CC Docket No. 04-102, dated October 28, 2002; Letter from Thomas J. Sugrue, Chief, Wireless Telecommunications Bureau, to Marlys R. Davis, E911 Program Manager, King County, Washington, at 1 (May 7,2001), *aff'd on recon.*, FCC 02-146, CC Docket No. 94-102. (rel. July 24, 2002).
[10] *Id*.

database is on the PSAP side of the demarcation point and as such the PSAP bears the cost required for any necessary ALI database upgrades. Many LECs have not yet been able to complete the necessary upgrades to the ALI databases that PSAPs use to receive 911 calls. Until this changes, some PSAPs will not be able to receive and utilize the Phase II signal that Western would send to them. Furthermore, many PSAPs have not yet been able to execute a service agreement with the LEC regarding payment for the trunking and routing services necessary for a Phase II call to work successfully. Any delays in executing service agreements, or filing and getting approval of LEC tariffs, will result in delays in the deployment of service.

Western has spent considerable effort and expense in pursuit of readying its network in order to deliver Phase I and Phase II services. In order for Phase II service to work, many network elements must be upgraded and the entire network, from handset to PSAP, must be carefully coordinated to provide a seamless interface to carry the Phase II signal. If any portion of the network, public or private, is not prepared to carry the Phase II signal, the enhanced service will not work. Western has undertaken significant efforts to upgrade its network to meet the Phase II requirements. Its activities have included testing GPS-capable handsets, cell sites, mobile switches, network facilities, and the PDE and MPC. Western is also closely working with the LECs and PSAPs to ensure that the existing emergency communications systems infrastructure will be capable of transporting and carrying the Phase II signal that Western will be sending to the PSAPs. Additionally, Western is working closely with national and state PSAP representatives to coordinate the planning and deployment of service.

IV. Deployment Status

Western has received one or more requests for delivery of Phase I E911 service from PSAPs in twelve of the 19 states in which it provides service. During the last three months, Western has received only four new requests for service from four different states.

In Western's rural markets, Western often finds itself first to deploy Phase I service to each of its requesting PSAPs, and frequently the PSAPs are largely unfamiliar with wireless networks and the deployment process. Because of this, Western is often the first carrier to explain and actually work through the deployment process with many of the PSAPs. The initial deployments for first-time PSAPs can result in steep learning curves and delays in implementation.

In accordance with the Commission's recent rule changes addressed in the *Richardson Order on Reconsideration*, a request for service from a PSAP is not valid unless a PSAP is capable or will be capable of receiving and utilizing the service by the end of the six-month deployment deadline.[11] The Commission's *Richardson Order* acknowledged that it is inefficient to require wireless carriers to waste valuable time attempting to deploy service in areas where the PSAP, because of its own or the LECs' unpreparedness, is not capable of receiving and utilizing the Phase II information.[12]

In spite of Western's best efforts to deploy E911 service in response to certain PSAP requests, the ability of Western to timely deploy service will be dependent upon

[11] See Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Petition of City of Richardson, Texas, CC Docket No. 94-102,Order on Reconsideration, (Nov. 26,2002)("Richardson Order on Reconsideration").

[12] See Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Petition of City of Richardson Texas, Order, 16 FCC Rcd 18987 (Oct. 17,2001)("Richardson Order").

the completion of necessary network facility and ALI database upgrades by the PSAPs and LECs. Timely deployment can also be contingent upon the responsiveness of the PSAP requesting delivery of the service. Deployment requires careful coordination and cooperation between the parties, and in some rural areas the PSAPs are thinly staffed and have many responsibilities besides focusing on wireless E911 deployment. Specific call routing assignments and other critical paperwork must be timely completed and exchanged between the parties. When delays occur it makes it difficult to complete deployment within the required timeline. Western has made every effort to work cooperatively with PSAPs in order to timely deploy service in accordance with Commission rules, and will continue to work with the PSAPs and LECs to resolve any issues impacting deployment of service.

Of the PSAPs that are facing LEC-related deployment issues, Western is attempting to work through the issues prior to informing them that their request for service is invalid under the *Richardson Order On Reconsideration.* In some instances, Western and the PSAP have reached an understanding on an alternative deployment agreement, which takes into account the Commission's new rules and the current situation surrounding the readiness of the vital network elements. Most PSAPs have agreed to work cooperatively with Western to overcome any potential obstacles that might delay the deployment of service. Copies of the alternative deployment agreements that Western has agreed to for various PSAPs have been submitted with earlier quarterly reports. Recently, Western and the Washakie County, Wyoming Sheriff's Office agreed to such a deployment arrangement. Western and the North Dakota Association of

Counties also recently agreed to work cooperatively together under a similar arrangement. Copies of both agreements are included under Attachment A.

Western is continuing discussions with other PSAPs to enter into similar cooperative deployment agreements. Specifically, Western is working with Churchill County, Nevada to resolve its technical issues and reach agreement on an appropriate deployment timeline. Western is confident that it can continue to work together cooperatively with its requesting PSAP to deliver service in a satisfactory manner.

Additionally, Western recently acquired Minnesota Southern Wireless Company ("MSWC") and is in the process of incorporating that company into its own operations, including the deployment of E911 services in the MSWC area of Minnesota. As part of this process Western has communicated and received approval of its MSWC E911 migration and continuing deployment plan from the Minnesota Statewide 9-1-1 Program Manager. Under this plan, Western will complete the MSWC migration and its on-going E911 deployments by the end of June 2004.

V. Phase I Requests

Including the new MSWC areas, Western has received over 280 requests for Phase I service and is currently delivering Phase I service to more than 210 of the requesting counties and PSAPs. Approximately 57 PSAPs are currently in the deployment process with Western.

VI. Phase II Requests

Western's Phase II requests are much more limited than its Phase I requests. Western has received over 60 requests for Phase II service from seven states. It is currently delivering Phase II service to eleven separate PSAPs. The large majority of

outstanding Phase II requests are in Minnesota and are targeted to be deployed with Phase II service during the second quarter of 2004, if not sooner. The Phase II requests from Nevada County and Lafayette County, Arkansas, and Wilbarger County, Texas, are currently in the deployment process. In sum, Western is in compliance with its E911 Phase II deployment obligations.

VII. Conclusion

Western is currently delivering Phase I and II service in those areas where the PSAP has completed its necessary equipment upgrades and where the LEC infrastructure, including the ALI database, have been sufficiently upgraded to pass along the Phase II location information. Western remains committed to working with all of its requesting-PSAPs to deliver E911 service to them as soon as technically possible. Attached as Attachment B is a completed spreadsheet ("Reporting Matrix") identifying the status for all requests for E911 service received by Western. A signed and notarized Affidavit supporting this quarterly report is attached in Attachment C.

Attachment A

Alternative Deployment Agreements
Washakie County, Wyoming
North Dakota Association of Counties

Attachment B

E911 Status Spreadsheet
Reporting Matrix

Attachment C

Affidavit